

1 STUDY PURPOSE/PROJECT DESCRIPTION

Under an agreement with the Federal Energy Regulatory Commission, the California Department of Water Resources (DWR) maintains a year round trout fishery in Piru Creek between Pyramid Dam and Frenchman's Flat, located in the Angeles National Forest. To implement this agreement the California Department of Fish and Game releases a total of 3,000 pounds of hatchery raised fish into Piru Creek at Frenchman's Flat between November and May. Trout reproduce naturally upstream of Frenchman's Flat and portions of the stream in this location are considered a catch and release area.

The purpose of this study is to conduct four mid-week and four weekend creel census surveys on randomly selected dates at middle Piru Creek and Frenchman's Flat from October 2003 through August 2004. Creel census surveys were undertaken to determine angler usage of the area and quantify the number and species of fish caught at each location. Surveys were conducted in the middle section of Piru Creek and Frenchman's Flat which are located approximately two miles downstream of Pyramid Dam.

2 SURVEY DATES AND CENSUS PERSONNEL

Creel census surveys were scheduled on the following dates during April 2004. Four mid-week surveys were scheduled on April 7th, 8th, 9th, and 30th, and four weekend dates were scheduled on April 3rd, 4th, 24th, and 25th. Aspen biologists conducted creel census training with the CDFG prior to deploying to the field. Field data were recorded for each angler present during the survey dates and included information including the type and number of fish caught, length and mass of the fish if not released, angler satisfaction, and age demographics. Creel census surveys in Piru Creek were conducted during the month of April 2004 by Lynn Stafford, and Christopher Meyer of Aspen Environmental Group, a DWR contractor.

3 SUMMARY

Male anglers continue to comprise the majority of fisherman at both Piru Creek and Frenchman's Flat. Of the two hundred and twenty-one anglers identified during the survey period, only twenty-five women (ca. 11% of all anglers) were noted fishing in the project area. No single female anglers were identified during the survey period. The total number of anglers recorded utilizing Piru Creek during April was the highest to date and increased 67% from the previous month. Warm weather may also have contributed to the increased day use at Frenchman's Flat, which included such activities as fishing, picnicking, hiking, and target shooting. Usage by family groups with small children remained high and numbers of young children were observed fishing with their parents.

As a group, approximately 96% of the anglers indicated they were satisfied with their general fishing experience. Those anglers fishing in the catch and release areas generally enjoyed their fishing experience better than anglers seeking fish for consumption. In addition, approximately 62% of the anglers were satisfied with the size of the fish caught and 56% indicated they were satisfied with the number of fish captured. Angler satisfaction with the size and number of fish captured was not substantially different from the previous month. As noted during previous surveys, anglers who catch fish for consumption indicate they are rarely satisfied with the number or size of the fish taken and consistently request that CDFG stock larger trout. See Figure 1 and 2 at the end of this report to compare angler satisfaction responses for creel census surveys conducted from October 2003 to April 2004.

Fly fisherman continue to comprise the majority of anglers utilizing both Frenchman's Flat and Piru Creek upstream of Frenchman's Flat and as a group all anglers released approximately 67% of fish

captured. This is similar to the percentage of fish released during the February and March survey period (approximately 60%). Interestingly, most fly fisherman release the majority of fish captured even when not fishing in the catch and release area. Most of fish released continue to be captured and released from the upper Piru Creek area although large numbers of fish were captured in both Frenchman's Flat. Angler usage at upper Piru Creek is higher during weekend periods by a factor of approximately two to one. Angler usage at Frenchman's Flat increased only slightly during weekend periods. This may be the result of increased day use by swimmers and picnickers driving fisherman to upper Piru Creek. Day continues to fluctuate with mid-week anglers using the site during lunch hours and the extended summer evening periods. Many anglers who utilize the site midweek appear to be fly fisherman who generally fish in the upper Piru Creek area.

Litter and refuse continue to dominate the majority of complaints received from both anglers and hikers. In addition, recent altercations have been reported between anglers and swimmers. Clean up efforts have been noted by a number of anglers and the USFS ranger organized a clean up effort that substantially improved conditions at Frenchman's Flat. Recently anglers began commenting on the dense riparian vegetation located along the stream banks. Apparently this affects the fly fisherman's ability to effectively cast into the stream. Likewise, several anglers requested some kind of effort to remove invasive species that prey on trout eggs in the catch and release area such as bullfrogs and crayfish. Poaching continues to be a concern and reports of pond turtle netting have been reported to the creel monitor.

Additional comments received by anglers during the survey period include:

- Area overgrown with vegetation-cannot cast fly rods effectively
- Control non-native species such as bullfrogs and crayfish
- Stock additional fish
- Pleased to see USFS Ranger Thomas Chacon arrange COC Prisoner Clean up Crew
- Very beautiful place being ruined by trash and debris
- Illegal and un-licensed fishing, pond turtle netting, spear fishing remains an ongoing concern
- Violations continue in catch and release areas on a regular basis
- Please provide additional USFS and CDFG patrols
- Provide warning signs for rattlesnakes
- Trash and human waste litter the areas after each weekend
- Different groups would like the gate opened up to allow vehicle access further up the creek
- Open fires an eyesore

Rainbow trout remain the primary species sought by all the anglers surveyed and were the only fish species caught and kept during the April survey period. Of the 663 fish captured, measurements were obtained for approximately 146 fish. Several of the fish captured had been gutted prior to weigh in. No hatchery marks were identified by the monitor and all fish observed had intact adipose fins. No significant difference in the lengths or mass of fish captured in Piru Creek was noted from previous months. Most fish were caught and released by the anglers prior to inspection by the monitor and anglers noted no abnormal or non-native fish. A brief summary of the creel census survey results for each site is located below. Table 1 and Table 2 summarize the creel census data, including statistics on measured fish, for the month of April 2004.

Table 1 Creel Census Data at Piru Creek and Frenchman's Flat April 2004.

Creel Census Location	Number of Anglers Per Site	Sex/Age Distribution of Anglers		Hours Fished Per Location	Number of Fish Caught	Number of Fish Released	Percent of Anglers Satisfied with Experience		
							Fishing Experience	Size of Fish	Number of Fish
Frenchman's Flat Mid-week	45	<16	2 (f) 6 (m)	155	163	71	93%	75%	64%
		16-30	9 (m)						
		31-45	2 (f) 14 (m)						
		46-55	7 (m)						
		56-65	3 (m)						
>65	2 (m)								
Frenchman's Flat Weekend	54*	<16	1 (f) 2 (m)	140	102	81	100%	30%	31%
		16-30	1 (f) 10 (m)						
		31-45	3 (f) 14 (m)						
		46-55	2 (f) 9 (m)						
		56-65	1 (f) 9 (m)						
>65	1 (f) 2 (m)								
Piru Creek Mid-week	37*	<16		154.5	201	173	97%	92%	84%
		16-30	2 (f) 9 (m)						
		31-45	12 (m)						
		46-55	8 (m)						
		56-65	3 (m)						
>65	1 (f) 2 (m)								
Piru Creek Weekend	85	<16	1 (m)	260.5	197	152	95%	50%	46%
		16-30	1 (f) 14 (m)						
		31-45	3 (f) 24 (m)						
		46-55	3 (f) 22 (m)						
		56-65	1 (f) 10 (m)						
>65	2 (f) 4 (m)								
Totals	221	<16	4 (f) 9 (m)	710	663	447	96%**	62%**	56%**
		16-30	4 (f) 42 (m)						
		31-45	8 (f) 64 (m)						
		46-55	5 (f) 46 (m)						
		56-65	2 (f) 25 (m)						
>65	2 (f) 10 (m)								

*Some anglers fished at two locations.

**Total number of anglers combined for both areas.

Table 2 Summary of Fish Size and Length by Area for Frenchman's Flat and Upper Piru Creek.

Creel Census Location	Number of Fish Caught	Number of Fish Measured	Average Length mm	Standard Deviation	Range mm	Average Mass grams	Standard Deviation	Range grams	Hatchery Marks
Frenchman's Flat Mid-week	163	56	220	35	(165-305)	229	50	(160-320)	Not observed
Frenchman's Flat Weekend	102	19	256	24	(225-325)	290	39	(250-425)	Not observed
Piru Creek Mid-week	201	29	201	42	(160-320)	194	32	(155-285)	Not observed
Piru Creek Weekend	197	42	236	22	(200-275)	258	27	(210-310)	Not observed

4. SURVEY RESULTS FRENCHMAN'S FLAT

Frenchman's Flat Mid-Week

- A total of forty-five (45) anglers were identified fishing at Frenchman's Flat
- One hundred and sixty-three (163) fish were caught and ninety-two (92) fish were kept by anglers during the midweek census period
- Average size of trout was 220 mm with a mass of 229 grams.
- Although mass data was available not all anglers allowed their have their fish to be weighed
- Some fish had been gutted prior to weigh-in and were excluded from the mass statistics
- Forty-five (45) of forty-two (42) anglers (93%) were satisfied with their fishing experience
- Thirty-four (34) of forty-five (45) anglers (75%) were satisfied with the number of fish caught
- Twenty-nine (29) of forty-five (45) anglers (64%) were satisfied with the size of the fish caught
- With the exception of four (4) female anglers (9% of anglers), all anglers were male
- Eight (8) anglers were less than sixteen years old, nine (9) anglers were between 16-30, sixteen (16) were between 31-45, seven (7) were between 46-55, three (3) were between 56-65, and two (2) were over 65 years of age.

Frenchman's Flat Weekend

A brief summary of creel census survey results is located below:

- A total of fifty-four (54) anglers were identified fishing at Frenchman's Flat
- One hundred-two (102) fish were caught and twenty-one (21) fish were kept during the weekend census period
- Average size of trout was 256 mm with a mass of 290 grams.
- Although mass data was available not all anglers allowed their have their fish to be weighed
- All fifty-four (54) anglers polled were satisfied with their fishing experience
- Sixteen (16) of fifty-four (54) anglers (30%) were satisfied with the number of fish caught
- Seventeen (17) of fifty-four (54) anglers (31%) were satisfied with the size of the fish caught
- With the exception of ten (10) female anglers (19%), all anglers were male
- Three (3) anglers were less than 16 years of age, eleven (11) anglers were between 16-30, seventeen (17) anglers were between 31-45 years of age, eleven (11) anglers were between 46-55 years of age, ten (10) were between 56-65 years of age, and three (3) were over 65 years of age.

5. SURVEY RESULTS PIRU CREEK

Piru Creek Mid-Week

- A total of thirty-seven (37) anglers were identified fishing in Piru Creek
- Two hundred and one (201) fish were caught and twenty-eight (28) kept during the midweek census period
- Average size of fish was 201 mm with a mass of 194 grams.
- Thirty-six (36) of thirty-seven (37) anglers (97%) were satisfied with their fishing experience
- Thirty-four (34) of thirty-seven (37) anglers (92%) were satisfied with the number of fish caught
- Thirty (30) of thirty-seven (37) anglers (81%) were satisfied with the size of the fish caught

- With the exception of three (2) female anglers (8% of anglers), all other anglers were male
- Eleven (11) anglers were between 16-30, twelve (12) anglers were between 31-45 years of age, eight (8) anglers were between 46-55 years of age, three (3) were between 56-65 years of age, and three (3) were over 65 years of age.

Piru Creek Weekend

- A total of eighty-five (85) anglers were identified fishing in Piru Creek
- One hundred ninety-seven (197) fish were caught and forty-five (45) fish were kept during the weekend census period
- Average size of trout taken was 236 mm with a mass of 258 grams
- Eighty-one (81) of eighty-five (85) anglers (95%) were satisfied with their fishing experience
- Forty-four (44) of eighty-five (85) anglers (52%) were satisfied with the number of fish caught
- Thirty-nine (39) of eighty-five (85) anglers (46%) were satisfied with the size of the fish caught
- With the exception of ten (10) female anglers (12%), all other anglers were male
- One (1) angler were less than 16 years of age, fifteen (15) anglers were between 16-30 years of age, twenty-seven (27) anglers were between 31-45, twenty-five (25) were between 46-55, eleven (11) anglers were between 56-65, and six (6) anglers were over 65 years of age.

Figure1. Percent Angler Satisfaction for Piru Creek
 Oct 2003-April 2004

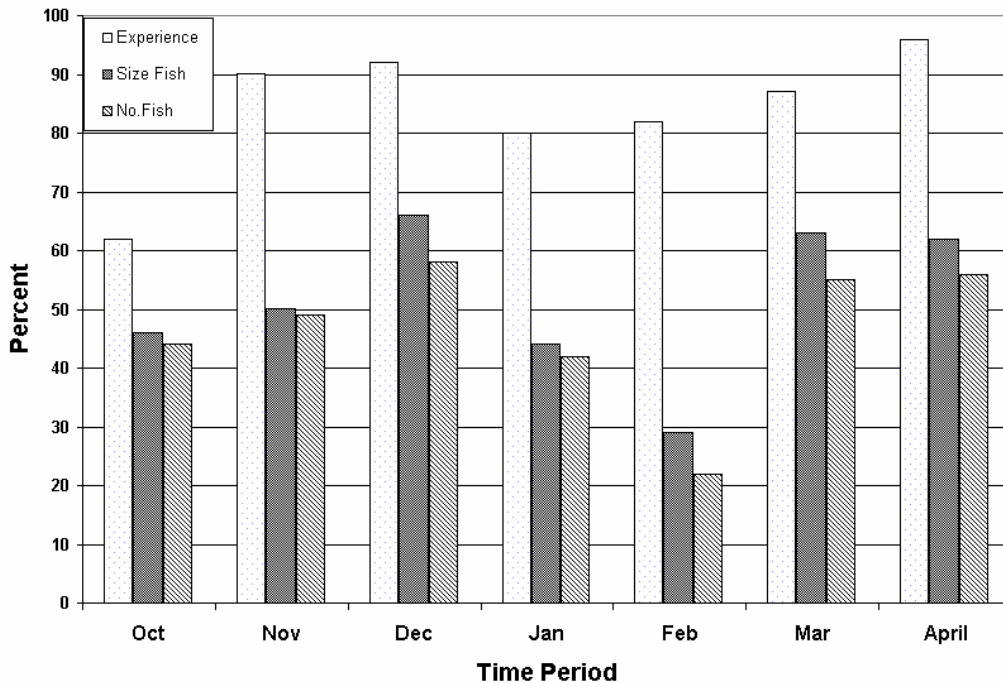


Figure 2. Total Number of Fish Caught and Released-Number of Anglers Present
Oct 2003-April 2004

